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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09 872,400	06 01 2001	Markus Andreasson	65088 NHZ RSM	2646

7590 07 08 2002

Cooper & Dunham LLP
1185 Avenue of the Americas
New York City, NY 10036

EXAMINER

KIM, AHSHIK

ART UNIT PAPER NUMBER

2876

DATE MAILED: 07 08 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,400

Applicant(s)

ANDREASSON ET AL.

Examiner

Ahshik Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-17 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-945)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3

b) ☐ Notice of Informal Patent Application (PTO-152)

c) ☐ Other

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DETAILED ACTION

Preliminary Amendment

1. Receipt is acknowledged of the preliminary amendment filed 10 October 2001.

5

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

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Continuation Data

3. Acknowledged this application claims benefit of U.S. provisional application Serial No. 60/215,968, filed July 5, 2000.

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Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

20 The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

25 The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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4. The abstract of the disclosure is objected to because the abstract is substantially a copy of the claims. As suggested, a single paragraph abstract concisely describing the substance of the invention is recommended.

Appropriate correction is required. See MPEP § 608.01(b).

5

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

10 (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

15

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment
20 by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-3, 5-13, and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by He et al. (US 6,328,213).

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the analog signal resulting from the portion of the captured barcode, the system determines a level of blur in the signal (See abstract). Once level of blur has been determined, a different technique is utilized in processing the electrical signal to produce digitized signal (col. 2, lines 37+). The system also discloses CCD, which captures image of the barcode in two-dimensional form (col. 4, lines 2+).

Re claim 2, edges are detected when the bar - black portion makes a transition to space - white portion (See abstract, col. 1, lines 50+) or from space to a bar. As shown in figure 2, A— A line suggests a beam/band over the barcode, which is perpendicular to the barcode.

Re claim 3, He et al. further teaches generating a histogram for the portion of the read bar code (col. 6, lines 23+).

Re claims 11-13, when a histogram is generated, a threshold is used to determine proper edge transitions (col. 2, lines 47+), which can be used in constructing the rest of the barcode. Obviously, in generating the barcode image, the one with the lowest threshold/error is the most probable image.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over He et al. (US 6,328,213) in view of Dwinell et al. (US 6,267,293). The teachings of He et al. have been discussed above.

He et al. fails to specifically teach or fairly suggest of reading and processing a barcode at an angle other than perpendicular to the code.

Dwinell discloses a barcode reading and processing system (see figure 2) wherein the barcode 20 may be read from an angle and partially read data can be reconstructed (col. 6, lines 56+).

In view of Dwinell's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ well-known barcode reading technique wherein the scanning beam is not perpendicular to the barcode to the teachings of He et al. in order to read the barcode from all directions/angles and thus, improve overall efficiency of the reading system. By scanning the code in omni-direction, aligning and scanning time on the product can be

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align the reader perpendicular to the code, and can be relieved from the physical strain and fatigue. Accordingly, such a modification would have been an obvious extension as taught by Dwinell for accommodating the user/customer, and thus an obvious expedient.

5 7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over He et al. (US 6,328,213) in view of Plesko (US 5,656,805). The teachings of He et al. have been discussed above.

He et al. fails to specifically teach or fairly suggest that the reading/scanning device is a pen type.

10 Plesko discloses a barcode reading pen 1, which reads one-dimensional and two-dimensional code (See abstract)

In view of Pleskon's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to design a reading device in the form of a pen in order to provide a comfort just like using a pen and capacity to scan an item from a distance. Pen type
15 scanners also provide users with a range of scanning speed and continuous scanning angles. Although He et al. was silent on the actual form of the device, a wand/pen type of scanning device is old and well-known in the art. Moreover, whether to select stationary or portable scanner such as a scanning pen can be considered to a design choice of a user. Accordingly, a user can choose any scanning device to suit their particular needs or design preference.

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Allowable Subject Matter

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8. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5 9. The following is a statement of reasons for the indication of allowable subject matter: Although He et al. discloses error handling in edge transitions or reconstructing the barcode, the cited references fail to specifically teach or suggest of disclosing the error function in terms of speed of the reading device as set forth in claim 10.

10

Conclusion

I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Feng et al. (US 5,717,195); He et al. (US 6,340,119); Xu (US 6,000,612); Kannon et al. (US 6,181,839); Stoner (US 6,318,637); Ma et al. (US 6,082,619); disclose various barcode
15 readers and related methods.

II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (703)305-5203. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday.

20 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax number directly to the Examiner is (703) 746-4782. The fax phone number for this Group is (703)308-7722, (703)308-7724, or (703)308-7382.

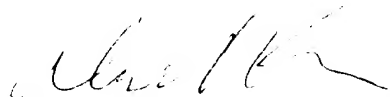
25 Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

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Ahshik Kim
Patent Examiner
Art Unit 2876
June 18, 2002

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THIEN M. LE
PRIMARY EXAMINER